

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,486	08/10/2001	Shingo Eguchi	12732-067001	2842

26171 7590 03/01/2004

FISH & RICHARDSON P.C.
1425 K STREET, N.W.
11TH FLOOR
WASHINGTON, DC 20005-3500

EXAMINER	
SEFER, AHMED N	
ART UNIT	**PAPER NUMBER**
2826	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,486	EGUCHI ET AL.	
	Examiner	Art Unit	
	A. Sefer	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-27* is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. The amendment filed on November 25, 2003 has been entered; no new claims have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ukai et al. USPN 5,521,729.

Ukai et al disclose in fig. 14 a semiconductor device comprising: a first electrode 2; an insulating film 15 formed on said first electrode; a contact hole 15H which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 4.sub.1 which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode 4.sub.2 or a pixel electrode (as in claim 3) provided on said insulating film; and a liquid crystal layer 7 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

As to claim 2, Ukai et al disclose a pixel electrode formed on said insulating film and said second electrode is in contact with said pixel electrode.

4. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawachi et al. USPN 6,559,906.

Kawachi et al disclose in figs. 6, 7, 10 and 13-17 a semiconductor device comprising: a first electrode 10; an insulating film 24 formed on said first electrode; a contact hole TH which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 11 which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode (constituted by 14, 15 and 11) or a pixel electrode (as in claim 3) provided on said insulating film; and a liquid crystal layer 506 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior

art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

As to claim 2, Kawachi et al disclose a pixel electrode formed on said insulating film and said second electrode is in contact with said pixel electrode.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Iizuka et al. USPN 6,515,720.

Iizuka et al disclose in fig. 3 a semiconductor device comprising: a first electrode 61; an insulating film 62 formed on said first electrode; a contact hole 79 which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 61C which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode provided 52 on said insulating film; and a liquid crystal layer 300 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

6. Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawachi et al. USPN 6,559,906.

Kawachi et al disclose in figs. 6, 7, 10 and 13-15 a semiconductor device comprising: a semiconductor film 30, a gate insulating film 20 formed on said semiconductor film; a first electrode 10 on said gate insulating film and overlaps said semiconductor film; an insulating film 24 formed on said first electrode; a contact hole TH which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 11 which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode (constituted by 14, 15 and 11) or a pixel electrode (as in claim 7) provided on said insulating film; and a liquid crystal layer 506 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

As for claim 6, Kawachi et al disclose a pixel electrode 14 formed on said insulating film and said second electrode is in contact with said pixel electrode.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Kawachi et al.

Kawachi et al disclose the device structure as recited in the claim, but omit electronic equipment selected from the group consisting of a personal computer, a video camera, a mobile computer, a digital camera and other various electronic equipment. However, Examiner takes Official Notice that an electronic equipment comprising a display device wherein said electronic equipment selected from the group consisting of a video camera or a digital camera is conventional and well known. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have used any of the various electronic equipment since Examiner takes Official Notice that due to their low power consumption, displays have become a necessary and indispensable structural element of an electronic equipment.

Allowable Subject Matter

9. Claims 9-27 are allowed.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ono USPN 6,646,287 disclose an electro-optical device loaded into electronic equipment.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

ANS
February 10, 2004